In Response to Office Action dated October 17, 2003

IN THE CLAIMS:

1. (Currently Amended) An optical switch comprising:

a first substrate;

an input optical fiber part attached to the first substrate, wherein the input optical

fiber part comprises a first fiber part support substrate;

an output optical fiber part attached to the first substrate and positioned at a

distance from the input optical fiber part, wherein the output optical fiber part comprises a

second fiber support substrate-;

a first micro-mirror part attached to the first substrate and positioned between the

input optical fiber part and the output optical fiber part, for reflecting a light from the input

optical fiber part, wherein the first micro-mirror part comprises a first micro-mirror support

substrate; and

a second micro-mirror part attached to the first substrate and positioned to reflect

light from the first micro-mirror part to the output optical fiber part, wherein the second micro-

mirror part comprises a second micro-mirror support substrate;

wherein at least two of the input optical fiber part, the output optical fiber part

first fiber support substrate, the second fiber support substrate, the first micro-mirror part

support substrate and the second micro-mirror part support substrate are mechanically coupled

to respective alignment grooves formed in the first substrate.

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2. (Currently Amended) An optical switch as claimed in claim 1, wherein the input

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and output optical fiber parts first and second fiber support substrates, and the first and second

micro-mirror parts support substrates are each mechanically coupled to respective alignment

grooves formed in the first substrate.

3. (Previously Presented) An optical switch as claimed in claim 1, wherein each of

the respective alignment grooves have upper sloped sides, and lower vertical sides, to form a

Ϋ́.

4. (Currently Amended) An optical switch as claimed in claim 1, wherein the at least

two parts support substrates are mechanically coupled to the respective alignment grooves with

epoxy.

5. (Previously Presented) An optical switch as claimed in claim 1, wherein the first

and second micro-mirror parts are arranged to be at 45° to an optical path of the light from the

input optical fiber part.

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6. (Currently Amended) An optical switch as claimed in claim 1, wherein each of the input and output optical fiber parts comprises a silicon fiber support substrate, and a two dimensional array of optical fibers coupled to the fiber support substrate, and each of the first and second micro-mirror parts comprises a silicon micro-mirror support substrate, and a two

dimensional array of micro-mirrors coupled to the micro-mirror support substrate.

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7. (Previously Presented) An optical switch as claimed in claim 1, wherein the input and output optical fiber parts are arranged in a parallel arrangement as one bundle, so that the optical axis of the input and output optical fiber parts makes a 45° angle with respect to each of the first, and second micro-mirror parts.

- 8. (Canceled).
- 9. (Currently Amended)An optical switch as claimed in claim 7, wherein the input and output optical fiber parts are coupled to first and second fiber support substrates comprise a common substrate.
- 10. (Previously Presented) An optical switch as claimed in claim 9, wherein the common substrate is attached to an alignment groove formed in the first substrate.

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11. (Previously Presented) An optical switch comprising:

a first substrate;

an input fiber array supported by a first fiber support substrate;

an output fiber array supported by a second fiber support substrate;

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a first micro-mirror array supported by a first micro-mirror support substrate, positioned to reflect light from the input fiber array; and

a second micro-mirror array supported by a second micro-mirror support substrate, positioned to reflect light from the first micro-mirror array towards the output fiber array;

wherein the first and second fiber support substrates, and the first and second micro-mirror support substrates are each supported on the first substrate by respective alignment grooves formed in the first substrate.

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